

Strachan, D.P. "Impedance tympanometry and the home environment in seven-year-old children" The Journal of Laryngology and Otology 104: 4-8, 1990

ABSTRACT. The distribution of tympanogram types among 872 seven-year-old children from a random population sample was related to 14 features of the home environment reported by parents in a questionnaire. Parental smoking was an important determinant of middle ear underpressure and effusion, and accounted for much of the associations observed with dampness, crowding and rented accommodation. Gas cooking was associated with a higher prevalence of effusion, but a lower prevalence of underpressure: this may deserve further study.

After adjustment for seasonal variation, tenure and household smokers, the weekly mean temperature in the bedrooms of 34 children with Type B tympanograms was 18.2°C compared to 17.9°C for 190 children with Type A tympanograms. The equivalent figures for bedroom relative humidity were 51.8 per cent and 52.7 per cent. It is unlikely that heating or ventilation of the home is an important determinant of middle ear effusion and underpressure in this age-group.

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